CLAIMS

1. A method for active vaccination against autologous cells expressing transmembrane proteins comprising administering to a patient a vaccine composition comprising at least an immunogenic portion of the extracellular domain of the transmembrane protein, or a xenogeneic homolog thereof, coupled to or administered with an carrier protein effective to break tolerance to the transmembrane protein and a pharmaceutically acceptable adjuvant.

2. The method of claim 1, wherein the transmembrane protein is selected from the group consisting of CD20, Her2-neu, VEGF receptor, epidermal growth factor receptor, the CD19 molecule, interleukin-2-receptor, interleukin-4-receptor, and the P-glycoprotein.

3. The method of claim 1, wherein the transmembrane protein is CD20.

4. The method of claim 1, wherein the vaccine composition comprises a peptide having the sequence given by Seq. ID No 1 or 2.

5. The method claim 1, wherein the carrier protein is keyhole limpet hemocyanin.

6. The method of claim 5, wherein the transmembrane protein is selected from the group consisting of CD20, Her2-neu, VEGF receptor, epidermal growth factor receptor, the CD19 molecule, interleukin-2-receptor, interleukin-4-receptor, and the P-glycoprotein.

7. The method of claim 5, wherein the transmembrane protein is CD20.

8. The method of claim 7, wherein the vaccine composition comprises a peptide having the sequence given by Seq. ID No 1 or 2.

9. A method for active vaccination against B cells expressing CD20 comprising administering to a patient a vaccine composition comprising at least an immunogenic portion of the extracellular domain of CD20, or a xenogeneic homolog thereof, coupled to or administered with an carrier protein effective to break tolerance to the transmembrane protein and a pharmaceutically acceptable adjuvant.

10. The method claim 9, wherein the carrier protein is keyhole limpet hemocyanin.

11. The method of claim 9, wherein the vaccine composition comprises a peptide having the sequence given by Seq. ID No 1 or 2.

12. A method for treatment of B cell non-Hodgkin's lymphoma, comprising administering to a patient suffering from B cell non-Hodgkin's lymphoma a vaccine composition comprising at least an immunogenic portion of the extracellular domain of CD20, or a xenogeneic homolog thereof, coupled to or administered with an carrier protein effective to break tolerance to the transmembrane protein and a pharmaceutically acceptable adjuvant.

13. A vaccine composition comprising at least an immunogenic portion of the extracellular domain of the transmembrane protein, or a xenogeneic homolog thereof, coupled to or administered with an carrier protein effective to break tolerance to the transmembrane protein and a pharmaceutically acceptable adjuvant.

14. The composition of claim 13, wherein the transmembrane protein is selected from the group consisting of CD20, Her2-neu, VEGF receptor, epidermal growth

factor receptor, the CD19 molecule, interleukin-2-receptor, interleukin-4-receptor, and the P-glycoprotein.

15. The composition of claim 13, wherein the transmembrane protein is CD20.

16. The composition of claim 15, wherein the vaccine composition comprises a peptide having the sequence given by Seq. ID No 1 or 2.

17. The composition of claim 13, wherein the carrier protein is keyhole limpet hemocyanin.

18. The composition of claim 17, wherein the transmembrane protein is selected from the group consisting of CD20, Her2-neu, VEGF receptor, epidermal growth factor receptor, the CD19 molecule, interleukin-2-receptor, interleukin-4-receptor, and the P-glycoprotein.

19. The composition of claim 17, wherein the transmembrane protein is CD20.

20. The composition of claim 19, wherein the vaccine composition comprises a peptide having the sequence given by Seq. ID No 1 or 2.